

## UNITED STATES PATENT OFFICE

2,303,941

## HINGE

Edward H. Lehman, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware

Application December 26, 1940, Serial No. 371,686

## 1 Claim. (Cl. 16—150)

This invention relates to hinges for swinging doors and more particularly doors of refrigerator automobile trucks.

One object of the invention is to provide a hinge for swinging doors which is adaptable, without modification, to posts of various transverse cross sectional contour, forming the walls of the door opening to which the doors are hinged.

A more specific object of the invention is to provide a hinge comprising pivotally connected hinge straps or leaves, one of which is flexible so that it is readily adaptable to fit against the outer surfaces of posts of various cross sectional contours, that is, posts having square corners or rounded posts or posts of other shapes.

Other objects of the invention will more clearly appear from the description and claim hereinafter following.

In the drawings forming a part of this specification, Figure 1 is a broken elevational view of a portion of one of the walls of an automobile refrigerator truck provided with swinging doors, illustrating my improvements in connection therewith. Figure 2 is a horizontal sectional view, corresponding substantially to the line 2—2 of Figure 1. Figure 3 is a view similar to Figure 2, but showing the hinge applied to a door post of different cross sectional contour. Figure 4 is an elevational view, on an enlarged scale, of the hinge shown in Figure 1, detached from the door and door post. Figure 5 is a horizontal sectional view, corresponding substantially to the line 5—5 of Figure 4.

In said drawings 10 indicates a portion of one of the walls of the body of a refrigerator automobile truck provided with a door opening 11 closed by hinged doors, a portion of one only of the doors being shown, said door being indicated by 12. As illustrated in Figures 1 and 2 one of the walls of the door opening is in the form of a post 13 of square transverse cross section, said post having an outer flat face or surface 14 parallel to the surface of the door 12 and an outer flat surface 15 at right angles to the surface 14. As shown in Figure 2, the rear portion of the surface 15 of the post is cut away at the side of the post to accommodate the wall portion 16 of the truck body, as is the usual practice. As shown in Figure 3, the door post, which is indicated by 17, which corresponds to the post 13 of Figure 2, is provided with a rounded outer surface or face 18 which is also common in refrigerator automobile truck bodies.

My improved hinge comprises broadly a rigid

hinge leaf or strap A secured to the door; a flexible hinge leaf or butt B secured to the door post; and a hinge pin C connecting the leaves A and B.

The hinge leaf A is in the form of a substantially flat plate comprising an elongated strap-like section 20, vertically enlarged at its inner end, as indicated at 21. The enlarged portion 21 is provided with a plurality of spaced eye members 22, which are preferably three in number. The eyes 22—22—22 are provided with vertically aligned pivot pin receiving openings 23—23—23. The plate portion of the hinge leaf A is provided with the usual countersunk screw receiving openings 24—24—24.

The hinge leaf B comprises a plurality of articulated sections, six being shown in the drawings, although a greater or lesser number may be employed. As disclosed in said drawings, with the exception of the section at the outer end of the leaf, the sections thereof are identical. The identical sections, which are five in number, are indicated by 25, and the section at the outer end of the leaf is indicated by 26. Each section 25 comprises a relatively narrow platelike portion provided at opposite sides with vertically spaced eye members, the eye members on one side being staggered with respect to the eye members on the other side. As shown most clearly in Figure 4, the eye members at the right hand side of each section 25 are four in number and comprise relatively narrow top and bottom members 27—27, and two relatively wider intermediate members 28—28. The eye members at the left hand side of each section 25 are three in number and are indicated by 29—29—29. The eye members 29 are relatively wide, as shown, and fit within the openings between the eye members 27—28—28—27 of the adjacent section. As will be seen, the eyes 29—29—29 at the left side are arranged in the same manner and correspond to the eyes 22—22—22 of the hinge leaf A. The eye members 27—28—28—27 at the right side of each section 25 are provided with vertically aligned pivot pin receiving openings 30 and the eye members 29—29—29 at the left hand side are provided with similar vertically aligned pivot pin receiving openings, also indicated by 30.

The section 26 of the leaf B is in the form of a narrow plate having hinge eyes on the right hand side thereof only, as shown most clearly in Figure 4. The hinge eyes of the section 26 are four in number and are identical with the eyes at the right hand sides of the sections 25—25 and are also indicated by 27—28—28—27. The outermost, or top and bottom eyes 29—29, at the